REFERENCES

Adams, A. E., MacKenzie, W. S., and Guilford, C., 1995, Atlas of sedimentary rocks under the microscope: New York, Longman Scientific and Technical, p. 1-104.

Agnew, P., 1998, Sepon stream sediment geochemistry: Interpretation file and target selection: Melbourne, Australia, Rio Tinto unpublished company report, p. 1-14.

Ahrendt, H., Chonglakmani, C., Hansen, B. T., and Helmcke, D., 1993, Geochronological cross section through northern Thailand: Journal of Southeast Asian Earth Sciences, v. 8, p. 207-217.

Albinson, T., Norman, D. I., Cole, D., and Chomiak, B., 2001, Controls on formation of low-sulphidation epithermal deposits in Mexico: constrains from fluid inclusion and stable isotope data: Society of Economic Geologists, v. 8, p. 1-32.

Alvarez, A. A., and Noble, D. C., 1988, Sedimentary rock-hosted disseminated precious metal mineralisation at Purisima Concepi'on, Yaurichocha District, Central Peru: Economic Geology, v. 83, p. 1368-1378.

Anderson, A. J., Clark, A. H., Ma, X. P., Palmer, G. R., McArthur, J. D., and Roedder, E., 1989, Proton-induced X-ray and Gamma-ray emission analysis of unopened fluid inclusions: Economic Geology, v. 84, p. 924-939.

APS, 2004a, Petrological studies of surface and sub-surface samples collected from various prospects in Laos and Thailand, January 2004: St Arnaud, New Zealand, Applied Petrological Services (APS), p. 24.

APS, 2004b, Petrology studies of diamond core from the Thengkham Copper Prospect, Lao PDR for Lane Xang Minerals Limited: St Arnaud, New Zealand, Applied Petrological Services (APS), p. 1-43.

APS, 2005, Petrological studies of diamond core from the Sepon copper-gold project area, southern Laos for Lane Xang Minerals Limited, January 2005: St Arnaud, Applied Petrological Services, p. 28.

Arehart, G. B., 1996, Characteristics and origin of sediment-hosted disseminated gold deposits: A review: Ore Geology Reviews, v. 11, p. 383-403.

Arne, D. C., Cromie, P. W., Webb, J. A., and Richards, J. R., 1994, The genesis of Pb-Zn sulphide occurrences in the Lower Devonian Buchan Group, Victoria.: Australian Journal of Earth Sciences, v. 41, p. 75-90.

Asadi, H. H., Voncken, J. H. L., and Hale, M., 1999, Invisible gold at Zarshuran, Iran: Economic Geology, v. 94, p. 1367-1374.

Ashley, R. P., Cunningham, C. G., Bostick, N. H., Dean, W. E., and Chou, I. M., 1991, Geology and geochemistry of three sedimentary-rock-hosted disseminated gold deposits in Guizhou Province, People's Republic of China: Ore Geology Reviews, v. 6, p. 133-151.

Ault, W. V., and Kulp, J. L., 1960, Sulphur isotopes and ore deposits: Economic Geology, v. 55, p. 73-100.

Backhouse, D. J., 2004, Geological setting, alteration and nature of mineralisation at Phu Kham copper-gold deposit, Lao PDR: Unpub. B.Sc. (Hons) thesis, University of Tasmania.

Bagby, W. C., and Berger, B. R., 1985, Geologic characteristics of sediment-hosted disseminated precious metal deposits in the western United States: Reviews in Economic Geology, v. 2, p. 169-202.

Baker, T., 2002, Emplacement depth and carbon dioxide-rich fluid inclusions in intrusion-related gold deposits: Economic Geology, v. 97, p. 1109-1115.

Baker, T., Mustard, R., Fu, B., Williams, P. J., Dong, G. Y., Fisher, L., Mark, G., and Ryan, C. G., 2008, Mixed messages in iron oxide-copper-gold systems of the Cloncurry district, Australia: insights from PIXE analysis of halogens and copper in fluid inclusions: Mineralium Deposita, v. 43, p. 599-608.

Bateman, 1999, Oxiana Resources N.L.: project evaluation: Brisbane, Bateman Engineering Pty Ltd, p. 1-57.

Berger, B. R., and Bagby, W. C., 1991, The geology and origin of Carlin-type gold deposits. *In* Foster R.P. (ed.) Gold Metallogeny and Exploration. Blackie, Glasgow, p. 210-243.

Bierlein, F. P., and Crowe, D. E., 2000, Phanerozoic orogenic lode gold deposits: Reviews in Economic Geology, v. 13, p. 103-137.

Birch, P. I., and Cullen, P. J., 1996, Technical summary and conclusions: Savannakhet production sharing contract, Peoples Democratic Republic of Laos: London, Enterprise Oil Exploration Ltd, p. 1-28.

Bodnar, R. J., 1993, Revised equation and table for determining the freezing point depression of H_2O-NaCl solutions: Geochimica et Cosmochimica Acta, v. 57, p. 683-684.

Bridges, J., and Herrington, R., 1999, Combined report on the petrography of drill core from Macedonia and Laos, January 1999: London, Department of Mineralogy, natural History Museum, p. 38.

Bunopas, S., and Vella, P., 1983, Tectonic and geologic evolution of Thailand: In. Nutalaya, P. (ed.), Proceedings of the Workshop on stratigraphic correlation of Thailand and Malaysia, Haad Yai, Thailand, 8-10 September, 1983, p. 307-323.

Bunyongkul, T., and Charusiri, P., 2000, Geology and mineralisation of Zn prospects in Vang Viang District, Vientiane Province, Lao PDR: A preliminary synthesis for Late-Palaeozoic to Early-Mesozoic tectonic setting: Journal of Scientific Res., Chulalongkorn University, Thailand, v. 24, p. 213-232.

Burrett, C., Long, J., and Stait, B., 1990, Early-middle Palaeozoic biogeography of Asian terranes derived from Gondwana: Geological Society of London, v. 12, p. 103-107.

Cannell, J., 2005, Geology of the Thengkham North Cu Resource, Unpublished company report for Oxiana Limited, p. 1-26.

Cannell, J., 2006, Geology report on exploration at Khanong during 2006, LXML unpublished company report for Oxiana Limited, p. 1-8.

Cannell, J., 2008, Sepon Copper Deposits, LXML unpublished company report for Oxiana Limited, p. 1-6.

Cannell, J., and Smith, S. G., 2008, High-grade supergene enriched and exotic Copper deposits in the Sepon Mineral District, Lao PDR: PACRIM Congress 2008, November 2008., p. 355-361.

Carr, G., and Gemmell, J. B., 1999, Lead isotope geochemistry: Application to ore deposits and mineral exploration. *In* Exploration geochemistry and hydrothermal geochemistry, Master of Economic Geology Course Work Manual 12: Centre for Ore Deposit Research, University of Tasmania, p. C1-C61.

Carr, G. R., Dean, J. A., Suppel, D. W., and Heithersay, P. S., 1995, Precise lead isotope fingerprinting of hydrothermal activity associated with Ordovician to Carboniferous metallogenic events in the Lachlan Foldbelt of New South Wales: Economic Geology, v. 90, p. 1467-1505.

Carter, A., Roques, D., Bristow, C., and Kinny, P., 2001, Understanding Mesozoic accretion in Southeast Asia: significance of Triassic thermotectonism (Indosinian orogeny) in Vietnam: Geology, v. 29, p. 211-214.

Castor, S. B., 1997, Sterling Mine, Nye County, Nevada. In Thompson T. B., (Ed.) Carlin-type gold deposits field conference (Guidebook), Society of Economic Geologists, Guidebook series, 28:, p. 167 - 170.

Charusiri, P., 1989, Lithophile metallogenic epochs of Thailand; a geological and geochronological investigation., PhD Thesis, Queens University, Kingston, Ontario, Canada, 891 p.

Charusiri, P., Daoreck, V., Archibald, D., Hisada, K., and Ampaiwan, T., 2002, Geotectonic evolution of Thailand: a new synthesis: Journal of the Geological Society of Thailand, v. 1, p. 1-20.

Christensen, O. D., 1995, Carlin-type sedimentary-rock-hosted gold deposits in Nevada and China: similar rocks - worlds apart, Geological Society of Nevada, News Letter, p. 1.

Christie, A. B., Pimpson, P., Brathwaite, R. L., Mauk, J. L., and Simmons, S. F., 2007, Epithermal Au-Ag and related deposits of the Hauraki Goldfield, Coromandel volcanic zone, New Zealand: Economic Geology, v. 102, p. 785-816.

Cline, J. S., 2001, Timing of gold and arsenic sulphide mineral deposition at the Getchell Carlin-type gold deposit, north-central Nevada: Economic Geology, v. 96, p. 75-89.

Cline, J. S., and Hofstra, A. H., 2000, Ore-fluid evolution at the Getchell Carlin-type god deposit, Nevada, USA: Eur. J. Mineral., v. 12, p. 195-212.

Cline, J. S., Hofstra, A. H., Landis, G., and Rye, R. O., 1997, Ore fluids at the Getchell, Carlin-type gold deposit, North-Central Nevada. *In* Thompson, T.B. *(ed.)*, Carlin-type gold deposits field conference (Guidebook): Society of Economic Geologists, Guidebook Series, v. 28, p. 155-166.

Cline, J. S., Hofstra, A. H., Muntean, J. L., Tosdal, R. M., and Hickey, K. A., 2005, Carlin-type gold deposits in Nevada: Critical geologic characteristics and viable models, *in* Hedenquist, J. W., Thompson, J. F. H., Goldfarb, R. and J., Richards, J. P., ed., Economic Geology One Hundredth Anniversary Volume: 1905-2005: Littleton, Colorado, Society of Economic Geologists, p. 451-484.

Cline, J. S., Hofstra, A. H., Premo, W., Riciputi, L., Tosdal, R. M., and Tretbar, D. R., 2003, Multiple sources of ore-fluid components at the Getchell Carlin-type gold deposit, Nevada, USA, *in* Eliopoulos D. et al. *(eds.)*, Mineral exploration and sustainable development, Rotterdam, Mill-press, v 2, p. 965-968.

Coller, D., 1999, Structural analysis of the Sepon basin, Laos for gold targeting: prepared for Lane Xang Minerals Limited, Rio Tinto Group: Dublin, Ireland, ERA-Maptec Limited, Unpublished report, p. 1-32.

Comsti, E., 1995, Fluid inclusion analyses of samples from Laos, PDR: Company report for Lane Xang Minerals Limited. 10 p.

Comsti, E., 1996a, Petrographic / mineragraphic analysis of Sepon samples, Lao PDR: Company report for Lane Xang Minerals Ltd., Vientiane, May 1996: Quezon City, Philippines, p. 31.

Comsti, E., 1996b, Petrographic analysis of five samples from Lao, PDR: Company report for Lane Xang Minerals Ltd., August 1996: Quezon City, Philippines, p. 16.

Comsti, E., 1996c, Petrographic and mineragraphic studies of nineteen (19) rock samples from Laos (5244013 to 5244031): Company report for Lane Xang Minerals Ltd., Vientiane, Lao P.D.R., February 1996: Quezon City, Philippines, p. 43.

Comsti, E., 1997, Petrographic analysis of surface and drill core samples from Lao, P.D.R.: Company report for Lane Xang Minerals Ltd, August 1997: Mandaluyong City, Philippines, Terradata, p. 1-26.

Comsti, E., 1998a, Petrographic/mineragraphic analysis of fifteen samples from Sepon, Lao, P.D.R. under D.P.O. No. 72934, including additional two samples without D.P.O. (c/o F.B. Lazo), November 1998: Madaluyong City, Philippines, Terradata, p. 33.

Comsti, E., 1998b, Petrographic/mineragraphic analysis of sixteen samples from Sepon, Lao P.D.R. under D.P.O. No. 72933 for Lane Xang Minerals Ltd, November 1998: Mandaluyong City, Philippines, Terradata, p. 28.

Cook, C., 2005, Conventional sulphur isotope analysis method used at the Central Science Laboratory, University of Tasmania: Personal communication, 1 p.

Cook, N., and Chryssoulis, S. L., 1990, Timing of gold and arsenic sulphide mineral deposition at the Getchell Carlin-type gold deposit, north-central Nevada: Canadian Mineralogist, v. 28, p. 1-16.

Cooke, D. R., and Simmons, S. F., 2000, Characteristics and genesis of epithermal gold deposits: Reviews in Economic Geology, v. 13, p. 221-244.

Coote, A., 1992, A petrological study of rock chip samples collected from Laos for CRA Exploration LTD: Auckland, CMS New Zealand Ltd, p. 1-20.

Craig, H., 1961, Isotopic variations in meteoric waters: Science, v. 133, p. 1702-1703.

Cromie, P. W., 2001, Geological setting, mineralogy and geochemistry of the Fu Ning Carlin-type gold deposits, Yunnan Province, China, Unpublished Master of Economic Geology Thesis, University of Tasmania, Hobart, Australia, 146 p.

Cromie, P. W., 2003, PhD research project scoping study report: a review of information to commence an investigation of the geological setting, geochemistry and genesis of the Sepon Mineral District, Laos: Hobart, CODES ARC Centre of Excellence in Ore Deposits, University of Tasmania, p. 1-28.

Cromie, P. W., 2004a, Preliminary U-Pb geochronology results from the Sepon Mineral District, Lao PDR; project Z0013716ORNL (Report number: PWCR04-UT01): Hobart, CODES ARC Centre of Excellence in Ore Deposits, University of Tasmania, p. 1-20.

Cromie, P. W., 2004b, Sepon PhD Research Project Annual Progress Report for 2004: An overview of research on the geological setting of gold and copper deposits in the Sepon Mineral District, Lao PDR; project Z0013716ORNL (Report number: PWCR04-UT02): Hobart, CODES ARC Centre of Excellence in Ore Deposits, University of Tasmania, p. 1-148.

Cromie, P. W., 2005, Sepon PhD Research Project Annual Progress Report for 2005: Research investigations into the geochronology, mineral paragenesis and geochemistry of gold and copper deposits occurring in the Sepon Mineral District, Lao PDR; UTAS project Z0013716ORNL (Report No. PWCR05-UT01). CODES ARC Centre of Excellence in Ore Deposits, University of Tasmania, p. 1-33.

Cromie, P. W., 2006, Sepon PhD Research Project Final Progress Report for 2006: Research investigations into the geochronology, mineral paragenesis and geochemistry of gold and copper deposits occurring in the Sepon Mineral District, Lao PDR; UTAS project Z0013716ORNL (Report No. PWCR06-UT01). CODES ARC Centre of Excellence in Ore Deposits, University of Tasmania, p. 1-33.

Cromie, P. W., 2007, Sepon Mineral District: PhD research project update - 8th June 2007 (Report number: PWCR07-UT01), CODES ARC Centre of Excellence in Ore Deposits, University of Tasmania, p. 1-13.

Cromie, P. W., and Khin_Zaw, 2003, Geological setting, nature of ore fluids and sulphur isotope geochemistry of the Fu Ning Carlin-type gold deposits, Yunnan Province, China: Geofluids, v. 3, p. 133-143.

Cromie, P. W., Khin_Zaw, and Smith, S. G., 2006a, New insights through LA-ICP-MS and sulphur isotope investigations into the occurrence of gold in the Sepon gold deposits, Laos: Australian Earth Sciences Convention (AESC), 2-6 July, Melbourne, 2006a, 2 p. CD-ROM.

Cromie, P. W., Khin_Zaw, and Smith, S. G., 2006b, The Sepon sedimentary-rock hosted gold deposits, Laos: Gold-ore paragenesis and geochemical investigation: SEG Conference, 14-16 May, Denver, 2006b, 2 p. CD-ROM.

Cromie, P. W., Manini, A. J., and Khin, Z., 2004a, Geological setting and characteristics of the Au and Cu deposits in the Sepon Mineral District, Lao PDR.: SEG 2004: Predictive Mineral Discovery Undercover, UWA, Perth, Western Australia, September, 2004a, p. 411.

Cromie, P. W., Manini, A. J., and Zaw, K., 2004b, The Sepon Mineral District, Lao PDR: an overview of the currently known geological setting and mineralisation: 17th Australian Geological Convention, Hobart, Tasmania, February, 2004b, p. 64.

Cullen, P. J., Birch, P. I., Wright, S. C., Kearney, C. I., and Pink, A. T., 1990, Exploration in the Savannakhet Basin, Peoples Democratic Republic of Laos: London, Enterprise Oil Exploration Ltd, Unpublished report, p. 1-11.

Cumming, G., James, R., Nuanla-ong, S., and Khin, Z., 2007, Volcanic setting of the Chatree epithermal Au-Ag deposit, central Thailand: AOGS2007 4th annual meeting, 30 July-4 August, Bangkok Thailand, 2007.

Cunningham, C. G., Ashley, R. P., Chou, I. M., Huang, Z. H., Wan, C. Y., and Li, W. K., 1988, Newly discovered sedimentary rock-hosted disseminated gold deposits in the People's Republic of China: Economic Geology, v. 83, p. 462-469.

Cunningham, C. G., Austin, G. W., Naeser, C. W., Rye, R. O., and Barker, C. E., 2004, Formation of a palaeothermal anomaly with the Bingham Canyon porphyry Cu-Au-Mo system, Utah: Economic Geology, v. 99, p. 789-806.

Danyushevsky, L. D., Robinson, P., McGoldrick, P., Large, R. R., and Gilbert, S., 2003, LA-ICPMS of sulphides: Evaluation of an XRF glass disc standard for analysis of different sulphide matrixes [abs.]: 2003 Goldschmidt Conference, Japan: Geochimica et Cosmochimica Acta, v. 67, p. 23.

De Little, J., 2005, Geological setting, nature of mineralisation and fluid characteristics of the Wang Yai prospect, central Thailand: Unpub. B.Sc. (Hons) thesis, University of Tasmania.

Debussy, J., Poty, B., and Ramboz, C., 1989, Advances in C-O-H-N-S fluid geochemistry based on micro-Raman spectrometric analysis of fluid inclusions: Eur. J. Mineral., v. 1, p. 517-534.

Deer, W. A., Howie, R. A., and Zussman, J., 1985, An introduction to the rock-forming minerals: Part 4, Framework silicates: Essex, Longman Group Limited, 310-311 p.

Diemar, M. G., and Diemar, V. A., 1999, Geology of the Chatree epithermal gold deposit, Thailand, *in* Weber, G., ed., PACRIM '99 Proceedings: International congress on earth science, exploration and mining around the Pacific Rim: Melbourne, AusIMM, p. 227-231.

Eggins, S. M., Grun, R., McCulloch, M. T., Pike, A. W. G., Chappell, J., Kinsley, L., Mortimer, G., Shelley, M., Murray-Wallace, C. V., Spotl, C., and Taylor, L., 2005, In situ U-series dating by laser ablation multi-collector ICPMS: new prospects for Quaternary geochronology: Quaternary Science Reviews, v. 24, p. 2523-2538.

Eggins, S. M., Kinsley, L. P. J., and Shelley, J. M. G., 1998, Deposition and element fractionation processes during atmospheric pressure laser sampling for analysis by ICP-MS: Applied Surface Science, p. 278-286.

Ekins, S. C. H., 2005, Stratigraphy of the Sepon District, Lao PDR: Unpub. B.Sc. (Hons.) thesis, University of Tasmania, 98 p.

Emsbo, P., 2000, Gold in SEDEX deposits: Reviews in Economic Geology, v. 13, p. 427-436.

Emsbo, P., Groves, D. I., Hofstra, A. H., and Bierlein, F. P., 2006, The giant Carlin gold province: a protracted interplay of orogenic, basinal, and hydrothermal processes above a lithospheric boundary: Mineralium Deposita, v. 41, p. 517-564.

Emsbo, P., Hofstra, A. H., Lauha, E. A., Griffin, G. L., and Hutchison, R. W., 2003, Origin of high-grade gold ore, source of ore fluid components, and genesis of the Meikle and neighbouring Carlin-type deposits, Northern Carlin-trend, Nevada: Economic Geology, v. 98, p. 1069-1105.

Feldman, M., 2005, Stratigraphy and mineralization of the Eastern Goldfields, Sepon Lao PDR: A review and assessment of scout drilling from Houay Bang with emphasis on stratigraphy of formations 1-3., Unpublished company report for Oxiana Limited, p. 1-20.

Feldman, M., 2006, Report on a review of scout drilling cores from Houay Bang Prospect, Sepon Project, Lao P.D.R. Oxiana company report.

Ferdock, G. C., Castor, S. B., Leonardson, G. C., and Collins, T., 1997, Mineralogy and paragenesis of ore stage mineralisation in the Betze gold deposit, Goldstrike Mine, Eureka County, Nevada. In Thompson T. B., (Ed.) Carlin-type gold deposits field conference (Guidebook), Society of Economic Geologists, Guidebook series, 28:, p. 75-86.

Fontaine, H., and Workman, D. R., 1978, Review of the geology and mineral resources of Kampuchea, Laos and Vietnam: Third regional conference on geology and mineral resources of southeast Asia, Bangkok, Thailand, 1978, p. 541-603.

Fortuna, J., Kesler, S. E., and Stenger, D. P., 2003, Source of iron for sulphidation and gold deposition, Twin Creeks Carlin-type deposit, Nevada: Economic Geology, v. 98, p. 1213-1224.

Gammons, C. H., 1997, Thermochemical sulphate reduction: A key step in the origin of sediment-hosted disseminated gold deposits. *In* Thompson, T.B. *(ed.)*, Carlin-type gold deposits field conference (Guidebook): Society of Economic Geologists, Guidebook Series, v. 28, p. 141-146.

Garnier, V., Ohnenstetter, D., Giuliani, G., Maluski, H., Deloule, E., PhanTrong, T., PhamVan, L., and HoangQuang, V., 2005, Age and significance of ruby-bearing marble from the Red River shear zone, Northern Vietnam: The Canadian Mineralogist, v. 43, p. 1315-1329.

Garwin, S. L., Hendri, D., and Lauricella, P. F., 1995, The geology of the Mesel sediment-hosted gold deposit, North Sulawesi, Indonesia: PACRIM'95, 1995, p. 221-226.

Gatinsky, Y. G., 2005, Tectonics and geodynamic prerequisites of mineral resource and distribution in the Indochina Region: Geology of Ore Deposits, v. 47, p. 309-235.

Gemmell, J. B., Simmons, S. F., and Zantop, H., 1988, The Santo Nino silver-lead-zinc vein, Fresnillo district, Zacatecas, Mexico: Part I. structure, vein stratigraphy and mineralogy: Economic Geology, v. 83, p. 1597-1618.

Glickson, M., 1997, Organic petrology report on Sepon basin samples., CRAE, Report No. 23334. 10 p.

Glickson, M., 1998, Organic petrology report on Sepon sub-basin, ACTEC. Company report for CRAE, 11 p.

Gregory, C. J., 1991, Sepon gold prospect, Laos: Internal memorandum: Bangkok, CRA Exploration, 12 p.

Griffin, W. L., Ashley, P. M., Ryan, C. G., S., S. H., and Suter, G. F., 1991, Pyrite geochemistry in the north arm epithermal Ag-Au deposit, Queensland, Australia: A proton-microprobe study: The Canadian Mineralogist, v. 29, p. 185-198.

Groves, D. I., Goldfarb, R. J., Gebre-Marian, M., Hagemann, S. G., and Robert, F., 1998, Orogenic gold deposits: a proposed classification in the context of their crustal distribution and relationship to other gold deposit types: Ore Geology Reviews, v. 13, p. 7-17.

Gulson, B. L., 1986, Lead isotopes in mineral exploration: Developments in Economic Geology, v. 23, p. 1-245.

Gunter, W. L., and Austin, G. W., 1997, Geology of the Melco gold deposit, Oquirrh Mountains, Utah. *In* John D.A. and Ballantyne, G.H. *(ed.)*, Geology and ore deposits of the Oquirrh and Wasatch Mountains, Utah: Society of Economic Geologists, Guidebook Series, v. 29, p. 227-240.

Hackman, D., 1998, Sepon geochemical review project: drill hole data analysis report: Melbourne, Australia, Rio Tinto unpublished report, p. 1-16.

Hada, S., Bunopas, S., Ishii, K., and Yoshikura, S., 1999, Rift-drift history and the amalgamation of Shan-Thai and Indochina/East Malaya blocks, In Metcalfe, I.; Jishun, R.; Charvet, J.; Hada, S. (Eds.): Gondwana dispersion and Asian accretion. IGCP 321 final results volume, p. 67-87.

Hall, C. M., Simon, G., and Kesler, S. E., 1997, Age of mineralisation at the Twin Creeks SHMG deposit, Nevada. *In* Thompson, T.B. *(ed.)*, Carlin-type gold deposits field conference (Guidebook): Society of Economic Geologists, Guidebook Series, v. 28, p. 151-154.

Hannington, M. D., and Scott, S. D., 1989, Sulphidation equilibria as guides to gold mineralisation in volcanogenic massive sulphides: evidence from sulphide mineralogy and the composition of sphalerite: Economic Geology, v. 84, p. 1978-1995.

Harris, A. C., Allen, C. M., Bryan, S. E., Campbell, I. H., Holcombe, R. J., and Palin, M. J., 2004a, ELA-ICP-MS U-Pb zircon geochronology of regional volcanism hosting the Bajo de la Alumbrera Cu-Au deposit: implications for porphyry-related mineralisation: Mineralium Deposita, v. 39, p. 46-67.

Harris, A. C., and Golding, S. D., 2002, New evidence of magmatic-fluid-related phyllic alteration: implications for the genesis of porphyry Cu deposits: Geology, v. 30, p. 335-338.

Harris, A. C., Golding, S. D., and White, N. C., 2005a, Bajo de la Alumbrera copper-gold deposit: Stable isotope evidence for a porphyry-related hydrothermal system dominated by magmatic aqueous fluids: Economic Geology, v. 100, p. 863-886.

Harris, A. C., Khin, Z., Meffre, S., Herrmann, W., Golding, S. D., and Barley, M., 2004b, Timing of mineralisation and magmatism: Ore deposits and tectonisim in the Loei Foldbelt, SE Asia, *in* Khin, Z., ed., Geochronology, metallogenesis and deposit styles of the Loei Foldbelt in Thailand and Lao PDR: Progress report 2, November 2004, ARC Linkage Project, Centre of Ore Deposit Research (CODES, UTAS) with Industry Partners.

Harris, A. C., Khin, Z., Metcalfe, I., Hermann, W., Golding, S. D., and Barley, M., 2005b, Ore deposits and tectonisim in fold-and-thrust belts of mainland SE Asia, *in* Khin, Z., ed., Geochronology, metallogenesis and deposit styles of the Loei Foldbelt in Thailand and Lao PDR: Progress report 4, May 2005: Hobart, CODES, University of Tasmania, p. 21.

Hattori, K. H., and Keith, J. D., 2001, Contribution of mafic melt to porphyry copper mineralisation: evidence from Mount Pinatubo, Philippines, and Bingham Canyon, Utah, USA: Mineralium Deposita, v. 36, p. 799-806.

Heithersay, P. S., and Walshe, J. L., 1995, Endeavour 26 North: A porphyry copper-gold deposit in the Late Ordovician, shoshonitic Goonumbla Volcanic Complex, New South Wales, Australia: Economic Geology, v. 90, p. 1506-1532.

Heitt, D. G., Dunbar, W. W., Thompson, T. B., and Jackson, R. G., 2003, Geology and geochemistry of the Deep Star gold deposit, Carlin trend, Nevada: Economic Geology, v. 98, p. 1107-1136.

Hellstrom, J., Paton, C., Woodhead, J., and Hergt, J., 2008, Lolite: software for spatially resolved LA-(quadrupole and MC) ICPMS analysis. Mineralogical Association of Canada short course series 40.

Henley, K. J., 1998a, Petrology of twenty six rock samples: Thebarton, South Australia, Amdel Limited, Mineral Services, p. 52.

Henley, K. J., 1998b, Petrology of two rock samples: Thebarton, South Australia, Amdel Limited, Mineral Services, p. 6.

Henley, R. W., 1984, Gaseous components in geothermal processes, In Henley, R.W., Truesdell, A.H. and Barton, P.B. (Ed's), Fluid-mineral equilibria in hydrothermal systems: Reviews in Economic Geology, v. 1, p. 45-56.

Hofstra, A. H., 1997, Isotopic composition of sulphur in Carlin type gold deposits: implications for genetic models. *In* Thompson, T.B. *(ed.)*, Carlin-type gold deposits field conference (Guidebook): Society of Economic Geologists, Guidebook Series, v. 28, p. 119-129.

Hofstra, A. H., and Cline, J. S., 2000, Characteristics and models for Carlin-type gold deposits: SEG Reviews, v. 13, p. 163-220.

Hofstra, A. H., Emsbo, P., Christiansen, W. D., Theodorakos, P., Zhang, X. C., Hu, R. Z., Su, W. C., and Fu, S. H., 2005, Source of ore fluids in Carlin-type gold deposits, China: Implications for genetic models, *in* Mao, J. W., and Bierlein, F. P., eds., 8th Biennial SGA Meeting, Mineral deposit research: meeting the global challenge: Beijing, P. R. China, Springer, p. 1107-1110.

Hofstra, A. H., John, D. A., and Theodore, T. G., 2003, A special issue devoted to gold deposits in northern Nevada: Part 2. Carlin-type deposits: Preface: Economic Geology, v. 98, p. 1063-1068.

Hofstra, A. H., Snee, L. W., Rye, R. O., Folger, H. W., Phinisey, J. D., Loranger, R. J., Dahl, A. R., Naeser, C. W., Stein, H. J., and Lewchuk, M., 1999, Age constraints on Jerritt Canyon and other Carlin-type gold deposits in the western United States - relationships to Mid-Tertiary extension and magmatism: Economic Geology, v. 94, p. 769-802.

Hu, R. Z., Su, W. C., Bi, X. W., Tu, G. Z., and Hofstra, A. H., 2002, Geology and geochemistry of Carlin-type gold deposits in China: Mineralium Deposita, v. 37, p. 378-392.

Huchon, P., Le Pichon, X., and Rangin, C., 1994, Indo-China peninsular and the collision of India and Eurasia: Geology, v. 22, p. 27-30.

Huston, D. L., Power, M., Gemmell, J. B., and Large, R. R., 1995, Design, calibration and geological application of the first operational Australian laser ablation sulphur isotope microprobe: Australian Journal of Earth Sciences, v. 42, p. 549-555.

Hutchison, C. S., 1989, Geological evolution of South-east Asia: Oxford, Clarendon Press, p. 1-350.

Ilchik, R. P., and Barton, M. D., 1997, An amagmatic origin of Carlin-type gold deposits: Economic Geology, v. 92, p. 269-288.

Jinshan_Gold_Mines, 2005, China projects: JBS property., Jinshan Gold Mines Inc. (www.jinshanmines.com).

John, D. A., Hofstra, A. H., and Theodore, T. G., 2003, A special issue devoted to gold deposits in Northern Nevada, Part 1. Regional studies and epithermal deposits: Preface: Economic Geology, v. 98, p. 225-234.

Johnston, M. K., and Ressel, M. W., 2004, Carlin-type and distal disseminated Au-Ag deposits: related distal expressions of Eocene intrusive centres in North-Central Nevada. In: Society of Economic Geologists Newsletter, v. 59, p. 11-13.

Johnston, M. K., Thompson, T. B., Emmons, D. L., and Jones, K., 2008, Geology of the Cove Mine, Lander County, Nevada, and a genetic model for the McCoy-Cove hydrothermal system: Economic Geology, v. 103, p. 759-782.

Jones, G., 2003, Geology of the Jinfeng gold deposit: a Chinese 'Carlin' analogy., *In* Lewis, P. C. (ed.), Asian update on mineral exploration and development, Bulletin 39: Perth. Australia, Australian Institute of Geoscientists, p. 39-47.

Kamvong, T., Khin, Z., and Harris, A. C., 2006, Geology and geochemistry of the Phu Lon copper-gold skarn deposit at the northern Loei Fold Belt, Northeast Thailand: Australian Earth Sciences Convention 2006, Melbourne, Australia, 2-6 July, 2006, p. 9.

Kerr, S. B., 1997, Geology of the Mercur gold mine, Oquirrh Mountains, Utah. *In* John D.A. and Ballantyne, G.H. *(ed.),* Geology and ore deposits of the Oquirrh and Wasatch Mountains, Utah: Society of Economic Geologists, Guidebook Series, v. 29, p. 241-254.

Kerrich, R., Goldfarb, R., Groves, D. I., and Garwin, S. L., 2000, The geodynamics of World-class gold deposits: characteristics, space-time distribution, and origins: Reviews in Economic Geology, v. 13, p. 501-551.

Kesler, S. E., Fortuna, J., Ye, Z. J., Alt, J. C., Core, D. P., Zohar, P., Borhauer, J., and Chyrssoulis, S. L., 2003, Evaluation of the role of sulphidation in deposition of gold, Screamer section of the Betze-Post Carlin-type deposit, Nevada: Economic Geology, v. 98, p. 1137-1157.

Khin Zaw, Burrett, C., Berry, R. F., and Bruce, E., 1999a, Geological and metallogenic relations of mineral deposits in SE Asia: Australian Industry Mineral Research Association (AMIRA) Final report, February 1999 (Unpublished), University of Tasmania: Hobart, CODES ARC Centre of Excellence in Ore Deposits, University of Tasmania, p. 1-225.

Khin Zaw, Burrett, C., Berry, R. F., Bruce, E., and Della-Pasqua, F., 1999b, Geological and metallogenic relations of mineral deposits in SE Asia: Geochronological studies: Australian Industry Mineral Research Association (AMIRA) Annex to Final report, December 1999 (Unpublished), University of Tasmania: Hobart, CODES ARC Centre of Excellence in Ore Deposits, University of Tasmania, p. 1-176.

Khin Zaw and Henderson, S., 1993, Geochemical and isotopic constraints for high grade gold mineralisation at Waitangi deposit, Thames district, Coromandel Peninsula, north island, New Zealand. Proceedings of the 27th annual conference 1993, New Zealand branch of the Australian Institute of Mining and Metallurgy, p. 133-141.

Khin Zaw and Large, R. R., 1996, Petrology and geochemistry of sphalerite from the Cambrian VHMS deposits in the Rosebery-Hercules district, western Tasmania: implications for gold mineralisation and Devonian metamorphic-metasomatic processes: Mineralogy and petrology, v. 57, p. 97-118.

Khin Zaw and Meffre, S., 2007, Supplementary report, *in* Khin, Z., ed., Geochronology, metallogenesis and deposit styles of the Loei Fold Belt in Thailand and Laos PDR: ARC Linkage Project, ARC Centre of Excellence in Ore Deposits with Industry Partners: Hobart, CODES Centre of Excellence, University of Tasmania, p. 1-24.

Khin Zaw, Meffre, S., and Students, 2007, Metallogenic relations and deposit-scale studies, *in* Khin, Z., ed., Geochronology, metallogenesis and deposit styles of the Loei Fold Belt in Thailand and Laos PDR: Final report - ARC Linkage Project, CODES with Industry Partners: Hobart, CODES Centre of Excellence, University of Tasmania, p. 7.5-7.16.

Khin Zaw, Cooke, D. R., and Kamenetsky, D., 1999, Fluid and melt inclusions. *In* Exploration geochemistry and hydrothermal geochemistry, Master of Economic Geology Course Work Manual 12: Centre for Ore Deposit Research, University of Tasmania, p. D1-D120.

Khin Zaw, Gemmell, J. B., Large, R. R., Mernagh, T. P., and Ryan, C. G., 1996, Evolution and source of ore fluids in the stringer system, Hellyer VHMS deposit, Tasmania, Australia: evidence from fluid inclusion micro-thermometry and geochemistry: Ore Geology Reviews, v. 10, p. 251-278.

Khin Zaw, Hunns, S. R., Large, R. R., Gemmell, J. B., Ryan, C. G., and Mernagh, T. P., 2003, Microthermometry and chemical composition of fluid inclusions from the Mt Chalmers volcanic-hosted massive sulphide deposits, central Queensland, Australia: implications for ore genesis: Chemical Geology, v. 194, p. 225-244.

Khin Zaw, Huston, D. L., Large, R. R., Mernagh, T. P., and Hoffmann, C. F., 1994, Microthermometry and geochemistry of fluid inclusions from the Tennant Creek gold-copper deposits: implications for ore deposition and exploration: Mineralium Deposita, v. 29, p. 288-300.

Kuehn, C. A., and Rose, A. W., 1992, Geology and geochemistry of wall-rock alteration at the Carlin gold deposit, Nevada: Economic Geology, v. 87, p. 1697-1721.

Kuehn, C. A., and Rose, A. W., 1995, Carlin gold deposits, Nevada: Origin in a deep zone of mixing between normally pressured and over pressured fluids: Economic Geology, v. 90, p. 17-36.

Lamb, J. B., and Cline, J. S., 1997, Depths of formation of the Meikle and Betze/Post deposits. *In* Thompson, T.B. *(ed.)*, Carlin-type gold deposits field conference (Guidebook): Society of Economic Geologists, Guidebook Series, v. 28, p. 101-107.

Lan, C. Y., Chunag, S. L., Lee, T. T., Wang, P. L., Li, H., and Toan, D. V., 2001, First evidence for Archean continental crust in northern Vietnam and its implications for crustal and tectonic evolution in Southeast Asia: Geology, v. 29, p. 219-222.

Landis, G. P., and Hofstra, A. H., 1991, Fluid inclusion gas chemistry as a potential minerals exploration tool: case studies from Creede, CO, Jerritt Canyon, NV, Coueur d'Alene district, ID and MT, southern Alaska mesothermal veins, and mid-continent MVT's: Journal of Geochemical Exploration, v. 42, p. 25-59.

Lang, J. R., and Baker, T., 2001, Intrusion-related gold systems: the present level of understanding: Mineralium Deposita, v. 36, p. 477-489.

Large, R. R., 1999, The use of stable isotopes in ore deposit research and exploration. *In* Exploration geochemistry and hydrothermal geochemistry, Master of Economic Geology Course Work Manual 12: Centre for Ore Deposit Research, University of Tasmania, p. A213-A235.

Large, R. R., Maslennikov, V. V., Robert, F., Danyushevsky, L. D., and Chang, Z. S., 2007, Multistage sedimentary and metamorphic origin of pyrite and gold in the giant Sukhoi Log deposit, Lena Gold Province, Russia: Economic Geology, v. 102, p. 1233-1267.

Leach, T., 2005, The distribution in alteration, geochemistry and mineralisation in four gold deposits, Sepon Mining District, Laos: Coromandel, N.Z., Terry Leach and Co., p. 84.

Leach, T., and Corlett, G., 1994, A petrological study of rock samples collected from the Sepon area, Laos for CRA exploration Ltd: Auckland, CMS New Zealand Ltd, p. 6.

Leach, T. M., 2004, Distribution of alteration and mineralisation in Northern Carlin trend gold deposits, Nevada: AusIMM PACRIM 2004 conference proceedings, Adelaide, September 2004, p. 153-159.

Leloup, P. H., Lacassin, R., Tapponnier, P., Scharer, U., Zhong, D. L., Liu, X. H., Zhang, L. S., Ji, S. C., and PhanTrong, T., 1995, The Ailao Shan-Red River shear zone (Yunnan, China), Tertiary transform boundary of Indochina: Tectonophysics, v. 251, p. 3-84.

Lepvrier, C., Maluski, H., Van Tich, V., Leyreloup, A., Thi, P. T., and Van Vong, N., 2004, The Early Triassic Indosinian orogeny in Vietnam (Truong Son Belt and Kontum Massif); implications for the geodynamic evolution on Indochina: Tectonophysics, v. 393, p. 87-118.

Lepvrier, C., Maluski, H., Van Vong, N., Roques, D., Axente, V., and Rangin, C., 1997, Indosinian NW-trending shear zones within the Truong Son belt (Vietnam) ^{40}Ar-^{39}Ar Triassic ages and Cretaceous to Cenozoic overprints: Tectonophysics, v. 283, p. 105-127.

Lepvrier, C., VanVuong, N., Maluski, H., Thi, P. T., and VanVu, T., 2008, Indosinian tectonics in Vietnam: C. R. Geoscience, v. 340, p. 94-111.

Li, Z. P., and Peters, S. G., 1998, Comparative geology and geochemistry of sedimentary rock-hosted (Carlin type) gold deposits in the People's Republic of China and Nevada, USA, United States Geological Survey Open-File Report 98-0466, p. 1-160.

Liu, D. S., Tan, Y. J., Wang, J., and Lui, L. L., 1991, Carlin-type gold deposits in China. *In* E. A. Laderia (ed.): Brazil Gold '91, p. 89-93.

Loader, S. E., 1999, Supergene enrichment of the Khanong copper resource, Sepon project, Lao PDR: PACRIM'99, Bali, Indonesia, 1999, p. 263-270.

Loader, S. E., Aquino, J. S., Norris, R. G., and Curtis, R. A., 1999, Review of stratigraphy, structure, alteration and mineralisation and tectonic history: Padan-Thengkham district, Sepon Project, Laos, Lane Xang Minerals Limited / Rio Tinto, Unpublished report No. 24272, p. 1-46.

Long, J., and Burrett, C., 1989, Fish from the Upper Devonian of the Shan-Thai terrane indicate proximity to east Gondwana and south China terranes: Geology, v. 17, p. 811-813.

LXML, 1995, DD95PDN001 drill hole report, 1995, LXML, Unpublished company report.

LXML, 1998, DD98TKM022 drill hole report, 1998, LXML, Unpublished company report.

LXML, 1999, DD99PDN002 drill hole report, 1999, LXML, Unpublished company report.

LXML, 2003, Sepon Project: Annual technical progress report for 2003, Ban Kengkok E48D 1:500,000, Lao PDR: Vientiane, Oxiana Limited, p. 1-72.

LXML, 2006, Sepon Project: Annual technical progress report for 2006, Ban Kengkok E48D 1:500,000, Lao PDR: Vientiane, Oxiana Limited.

Maluski, H., Lepvrier, C., Leyreloup, A., VanTich, V., and Thi, P. T., 2005, ^{40}Ar-^{39}Ar geochronology of the charnockites and granulites of the Kan Nack complex, Kontum Massif, Vietnam: Journal of Asian Earth Sciences, v. 25, p. 653-677.

Manaka, T., 2006, Geological setting and mineralisation characteristics of the LCT and Ban Houayxai deposits, Lao PDR - progress report: *In* Geochronology, metallogenesis and deposit styles of the Loei Foldbelt in Thailand and Lao PDR: Progress report submitted to ARC Linkage Project, November, 2006.

Manaka, T., 2008, Geological setting and mineralisation characteristics of the Long Chieng Track and Ban Houayxai deposits, Lao PDR, Unpublished Master of Economic Geology Thesis, CODES, ARC Centre of Excellence in Ore Deposits, University of Tasmania, Hobart, Australia, 156 p.

Manini, A. J., and Albert, P., 2003, Exploration and development of the Sepon gold and copper projects, Laos, Australian Institute of Geoscience - Asian Update Symposium 2003, Sydney Mineral Exploration Discussion Group.

Manini, A. J., Aquino, J., Gregory, C., and Aneka, S., 2001, Discovery of the Sepon District gold and copper deposits, Laos: New Generation Gold, Perth, 2001, p. 23.

Mao, J. W., Qiu, Y. M., Goldfarb, R. J., Zhang, Z. C., Garwin, S. L., and Ren, F. S., 2002, Geology, distribution and classification of gold deposits in the western Qinling belt, central China: Mineralium Deposita, v. 37, p. 352-377.

Markey, R. J., Hannah, J. L., Morgan, J. W., and Stein, H. J., 2003, A double spike for osmium analysis of highly radiogenic samples: Chemical Geology, v. 200, p. 395-406.

Markey, R. J., Stein, H. J., and Morgan, J. W., 1998, Highly precise Re-Os dating of molybdenite using alkaline fusion and NTIMS: Talanta, v. 45, p. 935-946.

Marten, B., 1997, Visit to Sepon project, Laos for structural input: preliminary note: Bangkok, RioTinto, Unpublished memorandum, p. 1-2.

Marten, B., 1998a, Notes on a visit to the Sepon project area: Newbury, UK, Rio Tinto, Unpublished report, p. 1-13.

Marten, B., 1998b, Sepon Project, Laos: results of a pilot micropaleontological study: Newbury, UK., Rio Tino, Unpublished report, p. 1-14.

Marten, B., 1998c, Structural geology in the Sepon project area, Laos: visit report, 13-27th February 1998: Newbury, UK, Rio Tino, Unpublished report, p. 1-32.

Martin, G. H., 1992, Laos Pakse contract area: geological field survey, Laos Hunt Oil Company, p. 1-41.

Meffre, S., and Khin Zaw, 2007, Geochemistry, geochronology and tectonic studies, *in* Khin, Z., ed., Geochronology, metallogenesis and deposit styles of the Loei Fold Belt in Thailand and Laos PDR: Final report - ARC Linkage Project, CODES with Industry Partners: Hobart, CODES Centre of Excellence, University of Tasmania, p. 6.1-6.11.

Meffre, S., Khin Zaw, and Harris, A. C., 2005, Loei belt U-Pb zircon geochronology results for 2005, *in* Khin, Z., ed., Geochronology, metallogenesis and deposit styles of the Loei Foldbelt in Thailand and Lao PDR: Progress report 4, May 2005: Hobart, CODES, University of Tasmania, p. 10.

Meffre, S., Khin Zaw, and Khositanont, S., 2008a, Tectonic implications of Early Permian metamorphism along the Nan-Uttaradit fault zone, Thailand: International Conference on Tectonics of Northwestern Indochina, Changmai, Thailand, 2008a, p. 21-22.

Meffre, S., Large, R. R., Scott, R. J., Woodhead, J., Chang, Z. S., Gilbert, S. E., Danyushevsky, L. D., Malennikov, V., and Hergt, J. M., 2008b, Age and pyrite Pb-isotopic composition of the giant Sukhoi Log sediment-hosted gold deposit, Russia: Geochimica et Cosmochimica Acta. p. 2377-2391.

Meinert, L. D., Dipple, G. M., and Nicolescu, S., 2005, World Skarn Deposits, *in* Hedenquist, J. W., Thompson, J. F. H., Goldfarb, R. J., and Richards, J. P., eds., Economic Geology 100th Anniversary Volume, Society of Economic Geologists: Littleton, Colorado, USA, p. 229-336.

Mernagh, T. P., Bastrakov, E. N., Khin Zaw, Wygralak, A. S., and Wyborn, L. A. I., 2007, Comparison of fluid inclusion data and mineralisation processes for Australian orogenic gold and intrusion-related gold systems: Acta Petrologica Sinica, v. 23, p. 21-32.

Metcalfe, I., 1996a, Gondwanaland dispersion, Asian accretion and evolution of eastern Tethys: Australian Journal of Earth Sciences, v. 43, p. 605-623.

Metcalfe, I., 1996b, Pre-Cretaceous evolution of SE Asia terranes. *In* Hall, R., Blundell, D., (eds), Tectonic evolution of Southeast Asia: London, Geological Society Special Publication 106, p. 97-122.

Metcalfe, I., 1999, Gondwana dispersion and Asian accretion: an overview. *In* Metcalfe, I. (ed.) Gondwana dispersion and Asian accretion: IGCP 321 final results volume: Rotterdam, Netherlands, A.A. Balkema, p. 9-28.

Metcalfe, I., 2006, Palaeozoic and Mesozoic tectonic evolution and palaeogeography of East Asian crustal fragments: The Korean Peninsula in context: Gondwana Research, v. 9, p. 24-46.

Morley, C. K., 2001, Combined escape tectonics and subduction roll-back arc extension: a model for the evolution of Tertiary rift basins in Thailand, Malaysia and Laos: Journal of the Geological Society, v. 158, p. 461-474.

Morris, D. G., 1996, Preliminary study of the relationship between jasperoid gold mineralisation and stratigraphy and sedimentary facies, Sepon Project, Laos, CRA Exploration, Unpublished report: No. 21554, p. 1-10.

Morris, D. G., 1997a, Sepon project Laos: relationships between precious and base metal mineralisation and stratigraphy, diagenetic alteration and hydrocarbon generation: Canberra, ACT Exploration Consultants Pty Ltd, Unpublished report: No. 5, p. 1-7.

Morris, D. G., 1997b, Sepon Project, Laos: interpretation of results of organic petrology study of samples from Discovery, Nalou and Nam Kok prospects: Canberra, ACT Exploration Consultants Pty Ltd, Unpublished report: No. 6, p. 1-18.

Morris, D. G., 1998, Sepon Project, Laos: report on field studies, June 1998. Target generation, geological mapping and sedimentology, ACT Exploration Consultants Pty Ltd, Unpublished report: No. 17.

Morris, D. G., 2006, Revision of the Stratigraphy of the Sepon Basin, ACT Exploration Consultants Pty Ltd, Unpublished company report for Oxiana Limited, p. 1-17.

Muller, C. J., 1999, Geochemistry, fluid characteristics and evolution of the French Mine gold skarn system: Unpub. B.Sc. (Hons) thesis, University of Tasmania.

Muntean, J. L., Cline, J. S., Johnston, M. K., Ressel, M. W., Seedorff, E., and Barton, M. D., 2004, Controversies on the origin of World-Class gold deposits, Part 1: Carlin-type gold deposits in Nevada: SEG Newsletter, v. 59, p. 1, 11-17.

Mustard, R., 2001, Granite-hosted gold mineralisation at Tambarra, northern New South Wales, Australia: Mineralium Deposita, v. 36, p. 542-562.

Nam, T. N., 1998, Thermotectonic events from Early Proterozoic to Miocene in the Indochina Craton: implications of K-Ar ages in Vietnam: Journal of Asian Earth Sciences, v. 16, p. 475-484.

Nam, T. N., Sano, Y., Terada, K., Toriumi, M., VanQuynh, P., and Dung, L. T., 2001, First SHRIMP U-Pb zircon dating of granulites from the Kontum massif (Vietnam) and tectonothermal implications: Journal of Asian Earth Sciences, v. 19, p. 77-84.

Neubauer, F., Borojevic-Sostaric, S., von Quadt, A., Peytcheva, I., Friedl, G., Genser, J., and Zeng, Z., 2005, Constraints on the formation of Carlin-type gold deposits in Sichuan and Gansu Provinces, China: 8th Biennial SGA Meeting, Mineral deposit research: meeting the global challenge, Beijing, 2005, p. 1251-1254.

Norris, R. G., 1999, Sepon Project: Annual technical progress report for 1998, Ban Kengkok E48D 1:500 000, Lao PDR: Vientiane, RioTinto, Unpublished report, p. 1- 46.

Nutt, C. J., and Hofstra, A. H., 2003, Alligator Ridge: A shallow Carlin-type gold district: Economic Geology, v. 98, p. 1225-1241.

Ohmoto, H., and Rye, R. O., 1979, Isotopes of sulphur and carbon. *In* Barnes, H.L. (ed.), Geochemistry of hydrothermal ore deposits., Wiley (New York), p. 509-567.

Olberg, D., Smith, S. G., and Manini, A. J., 2006, Exploration and geology of the Sepon sediment-hosted gold deposits, Laos: Australian Earth Science Convention (AESC) 2006, Melbourne, Australia, 2006, 4 p. CR-ROM.

Osterburg, M. W., 1990, Geology and geochemistry of the Chimney Creek gold deposit, Humbolt County, Nevada: Unpublished Ph.D. thesis, Tucson, University of Arizona, 173 p.

Oxiana, 2005, Quarterly Report: Summary for the three months ending 31 December 2005: Melbourne, Australia, Oxiana Limited, 4 p.

Oxiana, 2006, Quarterly Report: Summary for the three months ending 30 September 2006: Melbourne, Australia, Oxiana Limited, 4 p.

Ozcan, Y., Nelson, E. P., Hitzman, M. W., and Hoffstra, A. H., 2003, Structural controls on Carlin-type gold mineralisation in the Gold Bar District, Eureka County, Nevada: Economic Geology, v. 98, p. 1173-1188.

Pasteris, J. D., Kuehn, C. A., and Bodnar, R. J., 1986, Applications of the Laser Raman microprobe RAMANOR U-1000 to hydrothermal ore deposits: Carlin an example: Economic Geology, v. 81, p. 915-930.

Percival, T. J., Radtke, A. S., and Bagby, W. C., 1990, Relationships among carbonate-replacement gold deposits, gold skarns, and intrusive rocks, Bau mining district, Sarawak, Malaysia: Mining Geology, v. 40, p. 1-16.

Peters, S. G., Armstrong, A. K., Harris, A. G., Oscarson, R. L., and Noble, P. J., 2003, Bisostratigraphy and structure of Palaeozoic host rocks and their relationship to Carlin-type gold deposits in the Jerritt Canyon mining district, Nevada: Economic Geology, v. 98, p. 317-338.

Peters, S. G., Huang, J. Z., Li, Z. P., and Jing, C. G., 2007, Sedimentary rock-hosted Au deposits of the Dian-Qian-Gui area, Guizhou, and Yunnan Provinces, and Guangxi District, China: Ore Geology Reviews, v. 31, p. 170-204.

Petrie, B. S., Craw, D., and Ryan, G. C., 2005, Geological controls on refractory ore in an orogenic gold deposit, Macraes mine, New Zealand: Mineralium Deposita, v. 40, p. 45-58.

Phillips, D., 2000, ^{40}Ar-^{39}Ar Analyses of Adularia Feldspar Separates from Samples 5246273, 5246292 and 5427865, Sepon Project, Laos: Canberra, PRISE, ANU, p. 1-21.

Pontifex, I. R., 2000a, Mineralogical report number 8051, November 2000: Kent Town, South Australia, Pontifex and Associates Pty Ltd, 13 p.

Pontifex, I. R., 2000b, Mineralogical report number 8057, December 2000: Kent Town, South Australia, Pontifex and Associates Pty Ltd, 8 p.

Presnell, R. D. and Parry, W. T., 1996, Geology and geochemistry of the Barneys Canyon gold deposit, Utah: Economic Geology, v. 91, p. 273-288.

Radtke, A. S., Rye, R. O., and Dickson, F. W., 1980, Geology and stable isotope studies of the Carlin gold deposit, Nevada: Economic Geology, v. 75, p. 641-672.

Rak, P., 1999, The relationship between gold deposit distribution and major tectonic events in Southeast Asia, Unpublished B.Sc (Hons) Thesis, The University of Western Australia.

Reich, M., Kesler, S. E., Utsunomiya, S., Palenik, C. S., Chryssoulis, S. L., and Ewing, R., 2005, Solubility of gold in arsenian pyrite: Geochimica et Cosmochimica Acta, v. 68, p. 2781-2796.

Ressel, M. W., and Henry, C. D., 2006, Igneous geology of the Carlin Trend, Nevada: Development of the Eocene plutonic complex and significance for Carlin-type gold deposits: Economic Geology, v. 101, p. 347-384.

Ressel, M. W., Noble, D. C., Henry, C. D., and Trudel, W. S., 2000, Dike-hosted ores of the Beast deposit and the importance of Eocene magmatism in gold mineralisation of the Carlin-trend, Nevada: Economic Geology, v. 95, p. 1417-1444.

Robinson, B. W., and Kusakabe, M., 1975, Quantitative preparation of SO_2 for $^{34}S/^{32}S$ analyses from sulphides by combustion: Analytical Chemistry, v. 47, p. 1179 -1181.

Rodmanee, T., 2000, Genetic model of Phu Thap Fah gold deposit, Ban Huai Phuk Amphoe Wang Saphung, Changwat Loei: Unpub. MSc (unpublished) thesis, Chiang Mai University, Chiang Mai, Thailand.

Roedder, E., 1984, Fluid inclusions: Reviews in Mineralogy, v. 12, p. 1-644.

Rollinson, H. R., 1996, Using geochemical data: evaluation, presentation, interpretation, Longman, (Singapore), p. 1 - 314.

Ryan, C. G., 2000, Quantitative trace element imaging using PIXE and the Nuclear Microprobe: Int. J. Imaging Syst. Tech., v. 11, p. 219-230.

Ryan, C. G., 2004, Ion beam microanalysis in geoscience research: Nucl. Instr. Methods, v. B219/220, p. 534-549.

Ryan, C. G., Heinrich, C. A., van Achterbergh, E., Ballhaus, C., and Mernagh, T. P., 1991, Quantitative PIXE microanalysis of fluid inclusions based on a layered yield model: Nucl. Instr. Methods Phys. Res., v. B54, p. 292-297.

Ryan, C. G., Jamieson, D. L., Churms, C. L., and Pilcher, J. V., 1995, A new method for on-line true elemental imaging using PIXE and the Proton Microprobe: Nucl. Instr. Methods Rhys. Res., v. B104, p. 157-165.

Ryan, C. G., Jamieson, D. L., Griffin, W. L., Cripps, G., and Szymanski, R., 2001, The new CSIRO-GEMOC nuclear microprobe: First results, performance and recent applications: Nucl. Instr. Methods.

Ryan, C. G., van Achterbergh, E., Jamieson, D. L., and Churns, C. L., 1996, Overlap corrected on-line true elemental imaging using PIXE and the proton microprobe: Nucl. Instr. Methods, v. B109/110, p. 154-160.

Rye, R. O., and Ohmoto, H., 1974, Sulphur and carbon isotopes and ore genesis: A review: Economic Geology, v. 69, p. 826-842.

Salam, A., Charusiri, P., James, R., and Sutthirat, C., 2004, Magmatism and associated gold mineralisation in Thailand: implication for tectonic setting: International symposium on the geologic evolution of East and Southeast Asia, 8 - 14 February, Bangkok, Thailand, 2004, p. 77-79.

Salam, A., Khin Zaw, Meffre, S., James, R., and Stein, H. J., 2007, Geological setting, mineralisation and geochronology of Chatree epithermal gold-silver deposit, Petchabun Province, central Thailand: AOGS2007 4th annual meeting, 30 July - 4 August, Bangkok, Thailand, 2007.

Sangster, D. F., 1979, Sulphur and lead isotopes in stratabound deposits. *In* Wolf, K.H., (ed.) Handbook of strata-bound and stratiform ore deposits, Elservier, (Amsterdam), 261 p.

Sashida, K., and Igo, H., 1999, Occurrence and tectonic significance of Palaeozoic and Mesozoic Radiolaria in Thailand and Malaysia, *In* Metcalfe, I., (ed.), Gondwana dispersion and Asian accretion: Rotterdam, A.A. Balkema, p. 175-196.

Sato, K., Liu, Y. Y., Zhu, Z. C., Yang, Z. Y., and Otofuji, Y. I., 2001, Tertiary palaeomagnetic data from north-western Yunnan, China: further evidence for large clockwise rotation of the Indochina block and its tectonic implications: Earth and Planetary Science Letters, v. 185, p. 185-198.

Seedorff, E., and Barton, M. D., 2004, Enigmatic origin of Carlin-type deposits: An amagmatic solution?: Society of Economic Geologists Newsletter, v. 59, p. 13-18.

Sevastopulo, G. D., 1998, Report on samples from Laos: Dublin, Ireland, Trinity College, Department of Geology, 13 p.

Shepherd, T., Rankin, A. H., and Alderton, D. H. M., 1985, A practical guide to fluid inclusion studies., Blackie, Glasgow, 235 p.

Sillitoe, R. H., and Thompson, J. F. H., 1998, Intrusion-related vein gold deposits: types, tectono-magmatic settings and difficulties of distinction from orogenic gold deposits: Resource Geology, v. 48, p. 237-250.

Sillitoe, R. H., 1994a, Comments on geology and exploration of the Sepon gold prospect, Laos: London, Unpublished report for CRA Exploration, p. 1 - 7.

Sillitoe, R. H., 1994b, Further comments on geology and exploration of the Sepon gold prospect, Laos: London, Unpublished report for CRA Exploration, p. 1 - 21.

Sillitoe, R. H., 1995, Further comments on geology and exploration of the Sepon gold district, Laos: London, Unpublished report for CRA Exploration, p. 1 - 25.

Sillitoe, R. H., 1998, Comments on geology and exploration potential for copper and gold deposits at Sepon, Laos: London, Unpublished report for CRA Exploration, p. 1 - 12.

Sillitoe, R. H., 2004, Distal-disseminated and Carlin-type gold deposits: Are they fundamentally different?: SEG Newsletter, v. 59, p. 28-30.

Sillitoe, R. H., 2006, Exploration potential of the Sepon gold-copper district and environs, Laos, Unpublished consulting report for Oxiana Limited, p. 1-12.

Sillitoe, R. H., and Bonham, H. F., 1990, Sediment-hosted gold deposits: Distal products of magmatic-hydrothermal systems: Geology, v. 18, p. 157-161.

Simon, G., Kesler, S. E., and Chyrssoulis, S. L., 1999, Geochemistry and textures of gold-bearing arsenian pyrite, Twin Creeks, Nevada: Implications for deposition of gold in Carlin-type deposits: Economic Geology, v. 94, p. 405- 422.

Singharajwarapan, S., 1994, Deformation and metamorphism of the Sukhothai Fold Belt, Northern Thailand: Unpub. PhD thesis, University of Tasmania.

Singharajwarapan, S., and Berry, R. F., 2000, Tectonic implications of the Nan Suture Zone and its relationship to the Sukhothai Fold Belt, northern Thailand: Journal of Asian Earth Sciences, v. 18, p. 663-673.

Sitthithaworn, E., Albino, G. V., and Fyfe, W. S., 1993, Au-Cu mineralisation at Phu Lon, north-eastern Thailand: Transactions of the Institute of Mining and Metallurgy, v. 102, p. B181-B190.

Siu, C. H., 1991, Geology of Cambodia, Laos and Vietnam: Hanoi, Geological Survey of Vietnam, 157 p.

Smith, S. G., 2003, Sepon Au project review: controls on formation of Sepon Au deposits and regional project generation study: Brisbane, GeoDiscovery Group, Report No. sgsgd_075, p. 1-94.

Smith, S. G., 2004a, Geology of the Thengkham South copper prospect, Sepon District, Lao PDR, Unpublished LXML company report for Oxiana Limited, p. 1-14.

Smith, S. G., 2004b, Vang Ngang gold deposit - geological setting, Oxiana Limited, 1 p.

Smith, S. G., Olberg, D., and Manini, A. J., 2005, The Sepon gold deposits, Laos: exploration, geology and comparison to Carlin-type gold deposits in the Great Basin: Geological Society of Nevada Symposium, Reno, Nevada, 2005.

Smoliar, M. I., Walker, R. J., and Morgan, J. W., 1996, Re-Os isotope constraints on the age of Group IIA, IIIA, IVA and IVB iron meteorites: Science, v. 271, p. 1099-1102.

Sone, M., and Metcalfe, I., 2008, Parallel Tethyan sutures in mainland Southeast Asia: New sights for Palaeo-Tethys closure and implications for the Indosinian orogeny: Comptes Rendus Geoscience, v. 340, p. 166-179.

Stacey, J. S., and Kramer, J. D., 1975, Approximation of terrestrial lead isotope evolution by a two-stage model: Earth and Planetary Science Letters, v. 26, p. 207-221.

Stanton, R. L., and Russell, R. D., 1959, Anomalous leads and the emplacement of lead sulphide ores: Economic Geology, v. 54, p. 588-607.

Stein, H. J., Markey, R. J., Morgan, J. W., Du, A., and Sun, Y., 1997, Highly precise and accurate Re-Os ages for molybdenite from the East Qingling molybdenum belt, Shaanxi Province, China: Economic Geology, v. 92, p. 827-835.

Stein, H. J., Markey, R. J., Morgan, J. W., Hannah, J. L., and Schersten, A., 2001, The remarkable Re-Os chronometer in molybdenite: how and why it works: Terra Nova, v. 13, p. 479-486.

Stokes, R. B., Lovatt Smitt, P. F., and Soumphonphakdy, K., 1996, Timing of the Shan-Thai-Indochina collision: new evidence from the Pak Lay Fold Belt of the Lao PDR: London, The Geological Society, p. 225-232.

Stokes, R. B., and Smith, G. F., 1990, A review of the geology, structure and sedimentary basins of Laos: Gloucestershire, Integrated Exploration and Development Services Ltd, p. 1-161.

Tapponnier, P., Lacassin, R., Leloup, P. H., Scharer, U., Zhong, D. L., Wu, H. W., Liu, X. H., Ji, S. C., Zhang, L. S., and Zhong, J. Y., 1990, The Ailao Shan/Red River metamorphic belt: Tertiary left-lateral shear between Indochina and South China: Nature, v. 343, p. 431-437.

Tate, N. M., 2005, Discovery, geology and mineralisation of the Phu Kham copper-gold deposit, Lao PDR, *in* Mao, J. W., and Bierlein, F. P., eds., Mineral deposit research: Meeting the global challenge: Proceedings of the Eighth Biennial SGA meeting, Beijing, China, 18-21 August 2005, v. 2, p. 1077-1080.

Taylor, H. P., 1974, The application of oxygen and hydrogen isotope studies to problems of hydrothermal alteration and ore deposition: Economic Geology, p. 843-883.

Teal, L., and Jackson, M., 1997, Geologic overview of the Carlin trend gold deposits and descriptions of recent deep discoveries: Fort Collins, CO, SEG, v. 28, p. 3-37.

Theodore, T. G., Kotlyar, B. B., Singer, D. A., Berger, V. I., Abbott, E. W., and Foster, A. L., 2003, Applied geochemistry, geology and mineralogy of the northernmost Carlin-trend, Nevada: Economic Geology, v. 98, p. 287-316.

Thompson, J. F. H., and Newberry, R. J., 2000, Gold deposits related to reduced granitic intrusions: SEG Reviews, v. 13, p. 377-400.

Thompson, J. F. H., Sillitoe, R. H., Baker, T., Lang, J. R., and Mortensen, J. K., 1999, Intrusion-related gold deposits associated with tungsten-tin provinces: Mineralium Deposita, v. 34, p. 323-334.

Thompson, T. B., 2002, Carlin-type deposits: Great Basin, Nevada: *In* Cooke, D.R. and Pongratz, J. (eds.) Giant ore deposits: Characteristics, genesis and exploration, CODES Special Publication 4, p. 161-174.

Thoreson, R. F., Jones, M. E., Brett, F. J., Doyle-Kunkel, M. A., and Clarke, L. J., 2000, The geology and gold mineralisation of the Twin Creeks gold deposits, Humbolt County, Nevada: Society of Economic Geologists, Guidebook Series, v. 32, p. 175-187.

Tosdal, R. M., Cline, J. S., Mark Fanning, C., and Wooden, J. L., 2003, Lead in the Getchell-Turquoise Ridge Carlin-Type gold deposits from the perspective of potential igneous and sedimentary rock sources in Northern Nevada: Implications for fluid and metal sources: Economic Geology, v. 98, p. 1189-1212.

Townsend, A., Zongshou, Y., McGoldrick, P., and Hutton, J., 1998, Precise lead isotope ratios in Australian galena samples by high resolution inductively coupled plasma mass spectrometry: JAAS, v. 13, p. 809-813.

Tran Van, T., 1979, Geology of Vietnam, (the North part): Explanatory note to the geological map on 1:1000000 scale.: Hanoi, Science and Technical Publication House, (in Vietnamese) 354 p , (in English) 78 p.

Tretbar, D. R., Arehart, G. B., and Christensen, J. N., 2000, Dating gold deposition in a Carlin-type gold deposit using Rb/Sr methods on the mineral galkhaite: Geology, v. 28, p. 947-950.

Turner, S. J., Flindell, P. A., Hendri, D., Hardjana, I., Lauricella, P. F., Lindsay, R. P., Marpaung, B., and White, G. P., 1994, Sediment hosted gold mineralisation in the Ratatotok district, northern Sulawesi, Indonesia: Journal of Geochemical Exploration, v. 50, p. 317-336.

Vanderhor, F., 1997, Results of drill core studies, Sepon, Laos: Perth, Australia, RioTino, Unpublished memorandum, p. 1-14.

Vielreicher, N. M., Groves, D. I., Fletcher, I. R., Mcnaughton, N. J., and Rasmussen, B., 2003, Hydrothermal monazite and xenotime geochronology: a new direction for precise dating of orogenic gold mineralisation, SEG Newsletter, p. 1, 10-15.

Vilaihongs, M., Phommakaysone, K., and Senebouttalath, C., 1997, The main features of the geological structure in the territory of Laos: GEOTHAI'97 International conference on stratigraphy and tectonic evolution of Southeast Asia and the South Pacific, Bangkok, Thailand, 19 - 24 August, 1997, p. 770-779.

Wakita, K., and Metcalfe, I., 2005, Ocean plate stratigraphy in East and Southeast Asia: Journal of Asian Earth Sciences, v. 24, p. 679-702.

Wang, X. C., and Zhang, Z. R., 1999, Types and distribution of endogenic gold deposits in western Sichuan, China: International Geology Review, v. 41, p. 1099-1113.

White, N. C., and Herrington, R. J., 2000, Mineral deposits associated with volcanism, Academic Press, 897-912 p.

Wilde, A. R., 2003, The Golden Triangle of southeast China: Another Carlin-Trend?: SEG Newsletter, v. 55, p. 1, 9-12.

Wilson, A., Cooke, D. R., and Thompson, J. F. H., 2002, Alkalic and high-K calc-alkalic porphyry Au-Cu deposits: A summary: *In* Cooke, D.R. and Pongratz, J. (eds.) Giant ore deposits: Characteristics, genesis and exploration, CODES Special Publication 4, p. 51-55.

Wilson, A. J., Cooke, D. R., Harper, B. J., and Deyell, C. L., 2007, Sulphur isotopic zonation in the Cadia District, south-eastern Australia: exploration significance and implications for the genesis of alkalic porphyry gold-copper deposits: Mineralium Deposita, v. 42, p. 465-487.

Wilson, I. R., and Glover, J., 1990, Preliminary geological and geophysical evaluation of the Savannakhet Basin, southern Laos: London, Enterprise Oil Exploration Ltd, p. 1-22.

Wood, B. L., and Large, R. R., 2007, Syngenetic gold in western Victoria: occurrence, age and dimensions: Australian Journal of Earth Sciences, v. 54, n. 5, p. 711-732.

Woodhead, J., Hergt, J., Meffre, S., Large, R., Danyushevsky, L., and Gilbert, S., 2009, In situ Pb-isotope analysis of pyrite by laser ablation (multi-collector and quadrupole) ICPMS: Chemical Geology, *in press.*

Woodhead, J., Hergt, J., Shelley, M., Eggins, S., and Kemp, R., 2004, Zircon Hf-isotope analysis with an excimer laser, depth profiling, ablation of complex geometries, and concomitant age estimation: Chemical Geology, v. 209, p. 121-135.

Woodhead, J. D., Swearer, S., Hergt, J., and Maas, R., 2005, In situ Sr-isotope analysis of carbonates by LA-MC-ICP-MS: interference corrections, high spatial resolution and an example from otolith studies: Journal of Analytical Atomic Spectrometry, v. 20, p. 22-27.

Wopenka, B., and Pasteris, J. D., 1987, Raman intensities and detection limits of geochemically relevant gas mixtures for a laser Raman microprobe: Analytical Chemistry, v. 59, p. 2165-2170.

Workman, D. R., 1975, Tectonic evolution of Indochina: Journal of the Geological Society of Thailand, v. 1, p. 3-19.

Workman, D. R., 1990, Atlas of mineral resources of the ESCAP region: New York, United Nations, p. 1-19.

Yigit, O., Hofstra, A. H., Hitzman, M. W., and Nelson, E. P., 2006, Geology and geochemistry of jasperoids from the Gold Bar district, Nevada: Mineralium Deposita, v. 41, p. 527-547.

Zartman, R., E., and Doe, B. R., 1981, Plumbotectonics - the model: Tectonophysics, v. 75, p. 135-162.

Zartman, R., E., and Stacey, J. S., 1971, Lead isotope and mineralisation ages in belt supergroup rocks, Northwestern Montana and Northern Idaho, v. 66, p. 849-860.

Zhang, X. C., Hofstra, A. H., Hu, R. Z., Emsbo, P., Su, W. C., and Ridley, W. I., 2005, Geochemistry and delta34S of ores and ore stage iron sulphides in Catlin-type gold deposits, Dian-Qian-Gui area, China: Implications for ore genesis., *In* Mao, J. W., and Bierlein, F. P., (eds.), 8th Biennial SGA Meeting, Mineral deposit research: meeting the global challenge: Beijing, P. R. China, Springer, p. 1107-1110.

Zhang, X. C., Spiro, B., Halls, C., Stanley, C. J., and Yang, K. Y., 2003, Sediment-hosted disseminated gold deposits in Southwest Guizhou, P.R.C: Their geological setting and origin in relation to mineralogical, fluid inclusion, and stable-isotope characteristics: International Geology Review, v. 45, p. 407-470.

Zhao, X., Coe, R. S., Gilder, A., and Frost, G. M., 1996, Palaeomagnetic constraints on the palaeogeography of China: implications for Gondwanaland: Australian Journal of Earth Sciences, v. 43, p. 643-672.

Zongshou, Y., Robinson, P., and McGoldrick, P., 2001, An evaluation of methods for the chemical decomposition of geological materials for trace element determination using ICPMS: Geostandards Newsletter, v. 25.